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# Duct Tape Public Hearing

TITLE 24. CALIFORNIA ENERGY  
COMMISSION

**Docket No. 02-BSTD-1**

Comments of:

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Proctor Engineering Group, Ltd.

San Rafael, CA

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# **Report on Investigation of Duct Tape Installations**

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## **Survey of Manufacturers' Instructions**

Internet

Distributor

Contractor Search

## **Phone Survey of Contractors Self Reported Practices**

20 Contractors

December 2001 – January 2002



# **Manufacturers' Instructions**

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## **Duct Tape Manufacturers**

- No Instructions Found
- Only Disclaimers
- Pressure Sensitive Tape Council

## **Flex Duct Manufacturers**

- Air Diffusion Council



# Tape Manufacturers

## No Instructions – Typical Disclaimer

“Please remember that many factors can affect the use and performance of a 3M product in a particular application. The materials to be used with the 3M product, the surface preparation of those materials, the product selected for use, the conditions in which the product is used, and the time and environmental conditions in which the product is expected to perform are among the many factors that can affect the use and performance of a 3M product. Given the variety of factors that can affect the use and performance of a 3M product, some of which are uniquely within the user’s knowledge and control, **it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for the user’s method of application.**”



# Air Diffusion Council

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## Relevant Instructions

- Slide at least 1" of core over collar, pipe or fitting.
- Tape core with at least 2 wraps of duct tape.
- Secure with clamp
- (Note: Use clamps as specified on manufacturer's UL 181 Installation Instructions)
  - SHOW INSTRUCTIONS



# **The Instructions DO NOT SAY**

- To clean the fitting or collar before taping
- To use a continuous piece of duct tape
- To tape the inner core to the sleeve when joining two sections together



# **The Instructions DO NOT SAY**

- That tape is not to be used on attachments between plenums and takeoffs



# **Conclusion #1**

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**The “Manufacturer’s  
Installation Instructions”  
are inadequate to ensure an  
air tight and durable joint.**





# The Phone Survey of California Contractors

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- 80% of the contractors used duct tape where the air diffusion council provides installation instructions (sleeves and attachments to fittings)
- 55% also use it on takeoffs from plenums where industry representatives' testimony says "it should never be used"



# The Phone Survey of California Contractors

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- 25% use only tape, no clamp
- Only 17% use a single piece of tape wrapped multiple times



# The Phone Survey of California Contractors

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- 75% say that the newer tape has held its integrity  
“Very satisfied” “Works when it is done right”
- 20% say no or not all the time  
“looses adhesion over time”  
“dries out quickly”



## **Conclusion #2**

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**The Contractors' self reported  
behavior shows that some  
follow the manufacturers'  
minimal instructions**

**and**

**They do not follow the “Virtual  
Instructions”**



# **Recommendation**

**Cloth backed rubber adhesive  
duct tape should not be  
allowed until it is proven to  
work on duct systems as they  
are actually installed in  
California**

